

**AMENDMENTS TO THE CLAIMS**

This listing of claims will replace all prior versions, and listings of claims in the application:

Claim 1 (Previously Presented): A mixture for preparing a reactive hot melt adhesive comprising from 10 to 80 per cent by weight of a compound comprising at least one free isocyanate group and comprising from 20 to 90 per cent by weight of a polymer comprising at least one hydroxyl group and/or amino group and/or mercapto group and obtained by polymerizing ethylenically unsaturated monomers, wherein the polymer comprising at least one hydroxyl group and/or amino group and/or mercapto group has a polydispersity D of less than 1.9.

Claim 2 (Currently Amended): The mixture according to Claim 1, wherein the polymer comprising at least one hydroxyl group and/or amino group and/or mercapto group is obtained by copolymerizing one or more hydroxy-functionalized and/or amino-functionalized and/or mercapto-functionalized monomers and one or more monomers without hydroxyl and/or amino and/or mercapto functionality of alkyl esters of acrylic or methacrylic acid, vinyl esters, vinyl ethers, fumarates, maleates, styrenes and acrylonitrile.

Claim 3 (Previously Presented): The mixture according to Claim 1, wherein the polymer comprising at least one hydroxyl group and/or amino group and/or mercapto group has a glass transition temperature in the range from 15 to 85°C.

Claim 4 (Previously Presented): The mixture according to Claim 2, wherein the polymer comprising at least one hydroxyl group and/or amino group and/or mercapto group

has a number-average molecular weight of greater than or equal to 5000 g/mol and less than or equal to 100 000 g/mol.

Claim 5 (Previously Presented): The mixture according to Claim 2, wherein the polymer comprising at least one hydroxyl group and/or amino group and/or mercapto group has a hydroxyl number of greater than or equal to 4 and less than or equal to 80.

Claim 6 (Previously Presented): The mixture according to Claim 4, wherein the polymer comprising at least one hydroxyl group and/or amino group and/or mercapto group has a hydroxyl number of less than or equal to 40 for a number-average molecular weight of greater than or equal to 5000 g/mol and less than or equal to 25 000 g/mol.

Claim 7 (Previously Presented): The mixture according to Claim 1, wherein the polydispersity of the polymer comprising at least one hydroxyl group and/or amino group and/or mercapto group is adjusted by fractionation according to the molecular weight.

Claim 8 (Previously Presented): The mixture according to Claim 1, wherein the polymer comprising at least one hydroxyl group and/or amino group and/or mercapto group is prepared by a polymerization mechanism which enables a polydispersity D of less than 1.8.

Claim 9 (Previously Presented): The mixture according to Claim 8, wherein the polymer comprising at least one hydroxyl group and/or amino group and/or mercapto group is obtained by anionic polymerization, RAFT or ATRP.

Claim 10 (Previously Presented): The mixture according to Claim 1, wherein the compound comprising at least one free isocyanate group is a low molecular mass diisocyanate and contains an organic radical with an aromatic.

Claim 11 (Previously Presented): The mixture according to Claim 1, wherein the compound comprising at least one free isocyanate group is obtained by condensation polymerization of one or more low molecular mass polyisocyanates with one or more polyhydroxy compounds to form a urethane prepolymer.

Claim 12 (Previously Presented): The mixture according to Claim 1, wherein the compound comprising at least one free isocyanate group is obtained by condensation polymerization of one or more low molecular mass polyisocyanates with one or more polyamino- and/or polymercapto-containing compounds either alone together with one or more polyhydroxy compounds to form a urethane prepolymer.

Claim 13 (Previously Presented): The mixture according to Claim 1, wherein the reactive hot melt adhesive has an isocyanate functionality of greater than 1 and less than or equal to 3.

Claim 14 (Previously Presented): The mixture according to Claim 1, wherein the mixture further comprises additives such as plasticizers, compatible tackifiers, catalysts, fillers, antioxidants, pigments, stabilizers and thiol/silane-based adhesion promoters.

Claim 15 (Previously Presented): A reactive hot melt adhesive obtained by condensation reaction of the polymer comprising at least one hydroxyl group and/or amino

group and/or mercapto group with the compound comprising at least one free isocyanate group of the mixture according to Claim 1.

Claim 16 (Previously Presented): The reactive hot melt adhesive according to Claim 15, wherein the reactive hot melt adhesive exhibits a viscosity increase of less than 50% after 16 hours at 130°C.

Claim 17 (Previously Presented): The reactive hot melt adhesive according to Claim 15, wherein after curing the reactive hot melt adhesive contains less than 10 per cent by weight of extractables.

Claim 18 (Previously Presented): The reactive hot melt adhesive according to Claim 15, wherein the reactive hot melt adhesive has an open time of more than 400 seconds.

Claim 19 (Previously Presented): The reactive hot melt adhesive according to Claim 15, wherein the reactive hot melt adhesive has a shear strength after curing of more than 10 MPa.

Claim 20 (Previously Presented): A method for adhesively bonding wood, metal, plastic and glass surfaces or combinations thereof comprising utilizing the reactive hot melt adhesive according to Claim 15 to bond the surfaces.